

05.
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Editorial

May has been a busy month for the Water JPI. Working with our Danish colleagues at the Agency for Science, Innovation and Technology, our Secretariat prepared for the third meeting of the Water JPI Governing Board in Copenhagen on 14 May. We are happy to say that the meeting was a success and significant advances were made. The Governing Board achieved consensus on the Water JPI Strategic Research Agenda, the first version of which will be adopted by the end of the month. It also agreed on the pilot call for research and innovation projects, to be launched in September 2013. More information will be given on the pilot call in the months to come.



In addition, progress was shown on the Water JPI mapping exercise, international cooperation with countries outside Europe and the Water JPI communication strategy. The coordination team reported on progress achieved since the last meeting in Dublin and planned future actions for enhancing collaboration between JPI partner countries.

The Governing Board re-elected its leadership for the term of two years. JPI activities do not end there and while spring arrives all around Europe, there is much more to come. Further information will follow in the June issue of Water JPI Newsletter.

WATER JPI AND EIP WATER STRENGTHEN TIES

The Water JPI and [Eip-water](#) have recently agreed to proactively exchange information and mutually support each entity's outreach and communication activities. The European Innovation Partnership was approved in June 2012 and adopted its Strategic Implementation Plan (SIP) in December 2012. European Innovation Partnerships are part of the Innovation Union Flagship and aim to speed up innovations that contribute to solving societal challenges, enhance Europe's competitiveness and contribute to job creation and economic growth.

The EIP on water efficiency has the following goals: to speed up development of water innovation; to contribute to sustainable growth and employment; and to stimulate the uptake of water innovation by market and society.

Many of these aims are complementary, with water challenges being tackled by the Water JPI, as highlighted in its [Position Document on the European Innovation Partnership on Water](#) which

can be found on the Water JPI website. Now that the EIP on water is fully operational, the outcomes of the Action Groups evaluation will be available by the end of May 2013. More than 700 individual organizations were involved in the submission of proposals for the establishment of Action Groups on the eight EIP Water priority areas identified in the SIP. Another call for further Action Groups will be published later this year. Read more about the EIP [here](#)



MEETING OF THE FINNISH WATER JPI INTEREST GROUP

The national Water JPI interest group of Finland held their ^{fourth} meeting at the premises of the Academy of Finland on last 7 th May. The aim of these regular meetings is to harmonise the national views around JPI Water and contribute to its development. The scientists, programme managers and officers who attended the meeting represented the full spectrum of Finnish R&D knowledge with delegates from relevant Finnish ministries, universities, research institutes, Finnish Water Forum, AKA and Tekes.



The main focus of the meeting was national preparation for the meeting of the Water JPI Governing Board held in Copenhagen. The latest developments around Water JPI were introduced and the participants had a lively and a thorough discussion on the approach to mapping, the first version of the Strategic Research and Innovation Agenda and the thematic content of this year's pilot call. The meeting was chaired by Professor Seppo Rekolainen, vice-chair of Water JPI Stakeholders Advisory Group. The next meeting of the group will be held in September 2013.

ARTIFICIAL LEAF TO PRODUCE ENERGY FROM DIRTY WATER

The “artificial leaf” is developing: now it extracts energy from dirty water and repairs itself. A single litre of water can produce 100 watts of electricity round the clock. The new work is described in a paper presented in the “Proceedings of the National Academy of Sciences” by former MIT professor Daniel Nocera (now at Harvard University) and other contributors. It follows up on 2011 research that produced a “proof of concept” of an artificial leaf — a small device that, when placed in a container of water and exposed to sunlight, would produce bubbles of hydrogen and oxygen.

The device combines two technologies: a standard silicon solar cell, which converts sunlight into electricity, and chemical catalysts applied to each side of the cell. Together, these would create an electrochemical device that uses an electric current to split atoms of hydrogen and oxygen from the water molecules surrounding them. The goal is to produce an inexpensive, self-contained system that could be built from abundant materials. Nocera has long advocated such devices as a means of bringing electricity to billions of people, mostly in the developing world, who currently have little or no access to it. In March 2011 MIT professor Daniel Nocera, speaking at the National Meeting

of the American Chemical Society in California, claimed to have created an artificial leaf, made from stable and inexpensive materials, which reproduces nature's photosynthesis process. The device was an advanced solar cell, no bigger than a typical playing card, which is left floating in a pool of water. Then, much like a natural leaf, it uses sunlight to split the water into its two core components, oxygen and hydrogen, which are stored in a fuel cell to be used when producing electricity. The original demonstration leaf, in 2011, had low efficiencies, converting less than 4.7 percent of sunlight into fuel, but the team's new analysis shows that efficiencies of 16 percent or more should now be possible using single-bandgap semiconductors, such as crystalline silicon. A video explaining the innovative features of this device is available [here](#).

RESEARCH HIGHLIGHTS



WATER IN THE URBAN ENVIRONMENT

The three-day COST-WsTP conference on urban water brought together nearly 200 researchers, entrepreneurs and policy makers in water and water-related fields. It is now generally accepted that the key to successful water governance is to find the right balance between science and policy.

The speeches presented on day 1 and 2 were mostly research-orientated i.e. COST actions/ FP projects/ national reference project. Day 3 focused on innovation; hence a presentation of seven big enterprises took place.

Two members of the Water JPI Coordination team participated in the event to mark the strong links existing between all water related initiatives at European level. In fact, networking events like this create distinct environments for collaboration. A report on the [conference](#) will be ready by the end of May on the Water Supply and Sanitation Technology Platform (WsTP) and COST Programme websites.



OPPORTUNITIES



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NEWSLETTER



THE SPA FOUNDATION PRIZE

"Fonds de la Recherche Scientifique" (FNRS) based in Brussels is looking to award the Spa Foundation prize amounting 25.000 € to a postdoctoral researcher or a team of postdoctoral researchers for an original contribution in the field of "Water and Health".

Applications, written in English, must be submitted by e-mail by 1 June 2013 to the address prix@frs-fnrs.be. The application form and more detailed information about this open call is available from [here](#).

OPEN CALL TO HALT DESERTIFICATION

The Call is based on the Commission Decision of 31 October 2012 (C(2012)7588 final) to adopt the 2012 framework programme of the pilot projects "Atmospheric precipitation – protection and efficient use of fresh water", "Availability, use and sustainability of water for the production of nuclear and fossil energy" and of the preparatory action "Development of prevention activities to halt desertification in Europe", serving as financing decision.

The general objective of this Call is to obtain detailed information about the water resources available in the selected pilot basins and to demonstrate the potential of management, technological and economic measures to improve water management. The ultimate goal is to halt desertification in Europe and to decrease the continent's vulnerability to water scarcity and droughts. The total finance granted by DG Environment of the European Commission amounts 750.000 €. The deadline for proposals is 17 June 2013 at 17:00 Brussels time. For details see [here](#).



ECO-INNOVATION CALL FOR PROPOSAL

More than 31 million € funding is available for green projects. This call is open to all private and public subjects with a legal status that are based in eligible countries but priority will be given to small- and medium-sized enterprises (SMEs). Clusters of applicants and projects which demonstrate a European added value and have a high potential for market replication are strongly encouraged. The programme supports eco-innovative projects in different sectors which aim to reduce or prevent environmental impacts or which contribute to the optimal use of resources. Materials recycling, sustainable building products, food and drink sector, **water** and greening businesses are the priorities set up for this CIP ECO-INNOVATION call which will close on 5 September 2013 at 17:00 Brussels time. For details see [here](#)



UPCOMING EVENTS

SUMMER SCHOOL OF THE PROJECT WATERDISS 2.0

The objective of this FP7 project is to develop a water research transfer and dissemination service which helps researchers and practitioners who are involved in the implementation of the Water Framework Directive and its daughter directives find solutions to improve water management. A summer school is organised from 5 – 11 August 2013 in the San Servolo Island of the Venetian Lagoon on the theme "**Increasing sustainability in river basin planning: concepts and tools for river restoration**". The summer school programme is based on the participation of the project partners of some of the most relevant EU-funded research projects dealing with water topics. The deadline for registration is 1 July 2013. More information on the programme is available [here](#).

INTERNATIONAL CONFERENCE ON WATER SCARCITY

This event is organised within the framework of activities specified in the SCARCE Consolider Ingenio project whose aim is assessing and predicting the effects of climate change on water quantity and quality in Iberian rivers. This ^{fourth} SCARCE international conference will be held in Cádiz, Spain on 25-26 November 2013 and is entitled "Towards a better understanding of the links between stressors, hazard assessment and ecosystem services under water scarcity". More details are available [here](#)



THE PREVIOUS NEWSLETTERS ARE AVAILABLE FROM THE [wateripi](#) WEBPAGE

